



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,384	12/15/2003	Hiroshi Watanabe	KYO.P0024	4530

7590 09/21/2005

Edward G. Greive
Renner, Kenner, Greive, Bobak, Taylor & Weber
Fourth Floor
First National Tower
Akron, OH 44308-1456

EXAMINER

TON, ANABEL

ART UNIT PAPER NUMBER

2875

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,384

Applicant(s)

WATANABE ET AL

Examiner

Anabel M. Ton

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 5 and 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 4 and 9 are objected to because of the following informalities: Applicant recites, "is almost parallel to an imaginary straight line" in both claims. It is unclear where the reference point applicant is using is (being the imaginary straight line) since it does not actually exist. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2,4,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao et al (6,402,346).

2. Liao discloses the claimed invention except for the recitation of at least a part of the cover being made of a transparent material. Liao discloses a concave reflector having an open front end section (3); a light source having a light emitting unit (4), the unit being positioned on a focal point of the reflector; a cover attached to the open front end section of the reflector to cover the open front end section (71), the cover having an air inflow opening provided at a side section thereof in relation to the open front end section (62), a fan having an air outflow opening (72), the fan being provided so that airflow created by the fan and blown through the air outflow opening is directed to the

Art Unit: 2875

air inflow opening of the cover, without obstructing the light passing through the light passage (fig 5); and an air control unit provided between the air outflow opening of the fan and the air inflow opening of the cover(62, baffle), the air control unit controlling the airflow blown through the air outflow opening of the fan so that the airflow blown through the air outflow opening is flown into the reflector through the air inflow opening of the cover and directed at least to one specific section of the light source, thus cooling the specific section (fig 5). With regards to at least a part of the cover being made of a transparent material, the part being a light passage through which light emitted by the light source and reflected by the reflector passes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the cover of Liao of a transparent material for the purpose providing the light device of Liao with a cooling means that does not fully obstruct the emitted light from the light source.

- The light source has a first and a second sealing section sealing electrodes on both ends of the light source, the light emitting unit being interposed between the first and second sealing sections, the first sealing section being closer to the open front end section or the reflector than the second sealing section being, the specific section of the light source to be cooled being the first sealing section (col. 2 lines 30-37, fig 5).
- With regards to Liao having two or more air ducts in the air control unit, Liao discloses one baffle that provides one air duct into the light source. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Liao with two ore more air ducts since it has been held that mere

duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Furthermore such a modification would provide a desired greater amount of cooling to the light source of Liao.

Allowable Subject Matter

3. Claims 3,5,7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: The prior art cited does not teach the reflector having an outflow opening and the subsequent airflow into the reflector cooling the second sealing section of the light source, the airflow as recited in claim 7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton
Examiner
Art Unit 2875

AMT



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800